

09/171,236 (Haga et al.)



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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/171,236 07/13/99 HAGA

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EXAMINER

WM01/0205

GOOD	JOHNSON, M.
ART UNIT	PAPER NUMBER

2672

13

DATE MAILED:

02/05/01

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Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary	Application No.	Applicant(s)
	09/171,236	HAGA ET AL.
	Examiner	Art Unit
	Motilewa A. Good-Johnson	2672

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Status

- 1) Responsive to communication(s) filed on 13 July 1999.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 16-24 and 26-34 is/are pending in the application.
 - 4a) Of the above claim(s) 26 is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 16-24 and 27-34 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are objected to by the Examiner.
- 11) The proposed drawing correction filed on _____ is: a) approved b) disapproved.
- 12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
 - a) All b) Some * c) None of the CERTIFIED copies of the priority documents have been:
 1. received.
 2. received in Application No. (Series Code / Serial Number) _____.
 3. received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) Acknowledgement is made of a claim for domestic priority under 35 U.S.C. & 119(e).

Attachment(s)

14) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	17) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____
15) <input checked="" type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	18) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
16) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>7,10</u> .	19) <input type="checkbox"/> Other: _____

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DETAILED ACTION

1. This action is responsive to communications: application, filed on 07/13/1999; IDS, paper #4, filed on 02/04/1999; IDS, paper #7, filed on 11/01/1999; IDS, paper #10, filed on 09/06/2000.
2. Claims 15-24 and 26-34 are pending in this application.
3. The present title of the application is "Device and Method for Image Processing" (as originally filed).

Election/Restrictions

4. Claims 1-14 and 25 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a non-elected group, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in Paper No. 12.
5. Claim 25, group V will not be examined. The claims of group V consist of non-disappearing polygons that are not stated in claims of group IV.

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Priority

6. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Objections

7. Claim 26 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 26 is dependent upon claim 1, group I, which has not been elected.

Claim Rejections - 35 USC § 101

8. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

the claimed invention is directed to non-statutory subject matter

9. Claims 15-24 and 27-34 are rejected under 35 U.S.C. 101 because the claimed invention is directed to an image processing method, which merely manipulates data and is an abstract idea, which is non-statutory subject matter.

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Claims that are noted above as being rejected but that are not specifically cited below are rejected based on their dependency on rejected independent claims as incorporating the errors of those claims and not imparting any features leading to statutory subject matter.

With respect to independent claim 15, the claim recites "an image processing method . . . characterized by the steps of: comparing the position of an imaginary point . . . determining whether or not the results of said comparison match . . . and establishing said imaginary point as the main point . . ." The disclosed invention has a practical application, e.g., the comparison of point in a virtual space and position of a display object. The disclosed invention is within the technological arts, i.e., the disclosed invention uses a computer-aided design system. However, the steps of the method do not recite any post-computer process activity, i.e., no independent physical acts, and the steps of the method do not recite any pre-computer process activity, i.e., no manipulation of data representing physical objects or activities.

Therefore, in order to determine if the process is statutory, one must determine what the computer does to achieve a practical application. A process that merely manipulates an abstract idea is non-statutory despite the fact that it might inherently have some usefulness. For such subject matter to be statutory, the claimed process must be limited to a practical application of the abstract idea. Examiner finds no limitation to a practical application for the claimed method.

With respect to independent claims 16, 17, 20, 23, 24, 27, 28 and 31 see above rejection for independent claim 15.

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Claim Rejections - 35 USC § 102

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

11. Claims 16-24 and 27-34 are rejected under 35 U.S.C. 102(e) as being anticipated by Asai et al., U.S. Patent Number 5,779,548, "Game Apparatus and Method of Replaying Game", class 463/31, 07/14/1998.

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

12. Claims 16-24 and 27-34 are rejected under 35 U.S.C. 102(e) as being anticipated by Asai et al., U.S. Patent Number 5,779,548, "Game Apparatus and Method of Replaying Game", class 463/31, 07/14/1998.

As per independent claim 16, it is rejected based upon similar rational as above independent claim 15.

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As per independent claim 17, "an image processing method . . . characterized by comprising: polygons situated on a reference plan . . . ; determination means for determining the positional relationship . . . and polygon tilting means for tilting said polygons . . . Asai et al. discloses in col. 12, lines 1-24.

With respect to dependent claim 18, ". . . reference plane is the ground, and said polygons are polygons forming lines situated on said ground." Asai et al. discloses in Figure 13A.

With respect to dependent claim 19, ". . . polygons are quadrilateral, and said polygon tilting means modifies the coordinate values of the vertices on one of the sides of mutually facing sides . . . Asai et al. discloses in col. 12, lines 8-24.

As per independent claim 20, "an image processing device . . . characterized by comprising: determination means for determining whether or not said objects are in a specific area . . . and camera angle adjusting means for adjusting the angle of said virtual camera based on the results . . . Asai et al. discloses in col. 9, lines 42-55.

With respect to dependent claim 21, ". . . camera angle adjusting means adjusts the angle of said virtual camera based on the results . . . Asai et al. discloses in col. 9, lines 51-55.

With respect to dependent claim 22, ". . . camera adjusting means adjusts the angle of said virtual camera in at least one of either the lateral and vertical directions . . . Asai et al. discloses in col. 14, lines 47-60.

As per independent claim 23, "an image processing device . . . comprising: determination means for determining whether or not said objects are in a specific area . . . and zoom adjusting

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means for adjusting the range of the field of vision . . . Asai et al. discloses in col. 14, lines 61-67.

As per independent claim 24, "an image processing device . . . comprises: angle computing means for computing the angle between an eye direction vector showing the direction in which said virtual camera is facing and a normal line vector . . . and polygon tilting means for changing the coordinate values of the vertices of said polygons . . . Asai et al. discloses in col. 9, lines 42-55.

As per independent claim 27, it is rejected based upon similar rational as above independent claim 17.

As per independent claim 28, it is rejected based upon similar rational as above independent claim 17.

With respect to dependent claim 29, "a game machine . . . for executing a game by situating objects in said virtual three-dimensional space and by controlling objects . . . Asai et al. discloses in col. 9, lines 62-67.

With respect to dependent claim 30, ". . . game is a game in which objects are situated in a game field formed on a reference plane . . . Asai et al. discloses in Figure 14.

As per independent claim 31, it is rejected based upon similar rational as above independent claim 17.

With respect to dependent claim 32, ". . . polygons are polygons that show lines." Asai et al. discloses in col. 12, lines 1-15.

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With respect to dependent claim 33, situating objects in said virtual three-dimensional space and by controlling said objects . . . Asai et al. discloses in col. 9, lines 62-67.

With respect to dependent claim 34, “. . . polygons are polygons forming lines described on said plane.” Asai et al. discloses in col. 12, lines 13-15.

Conclusion

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

5,363,297 Larson et al. 364/410 11/08/1994

Automated camera-based tracking system for sports contests.

5,990,896 Barrus 345/420 11/23/1999 09/30/1996

Rapid and efficient terrain surface finding system.

6,078,329 Umeki et al. 345/419 06/20/2000 09/27/1996

Virtual object display apparatus and method employing viewpoint updating for realistic movement display in virtual reality.

14. Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, DC 20231

or faxed to:

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(703)-308-9051 (**formal** communications intended for entry),

Or:

(703)-305-9724 (**informal** communications labeled **PROPOSED** or **DRAFT**).

Hand-delivered responses should be brought to:

Sixth Floor Receptionist, Crystal Park II, 2121 Crystal Drive, Arlington, VA.

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Motilewa Good-Johnson, whose telephone number is (703)-305-3939 and can normally be reached Monday- Friday from 7:30 AM to 4 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mike Razavi, can be reached at (703)-305-4713.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the group receptionist whose telephone number is (703)-305-4700.

Motilewa Good-Johnson
Patent Examiner
Art Unit 2672

Jeffery G. Brier
JEFFERY BRIER
PRIMARY EXAMINER